#13 Raw
Sequence
Listing
1632
6-13-01 PB

RAW SEQUENCE LISTING   DATE: 06/13/2001
PATENT APPLICATION: US/09/454,684A   TIME: 19:49:16

Input Set : A:\469c4.app.txt
Output Set: N:\CRF3\06112001\I454684A.raw

PS

ENTERED

```
 4 <110> APPLICANT: Probst, Peter
 5         Bhatia, Ajay
 6         Skeiky, Yasir
 7         Fling, Steve
 8         Maisonneuve, Jeff
11 <120> TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TREATMENT AND
12        DIAGNOSIS OF CHLAMYDIAL INFECTION
15 <130> FILE REFERENCE: 210121.469C4
17 <140> CURRENT APPLICATION NUMBER: US/09/454,684A
18 <141> CURRENT FILING DATE: 1999-12-03
20 <160> NUMBER OF SEQ ID NOS: 310
22 <170> SOFTWARE: FastSEQ for Windows Version 3.0/4.0
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 481
26 <212> TYPE: DNA
27 <213> ORGANISM: Chlamydia trachomatis
29 <400> SEQUENCE: 1
30  ctgaagactt ggctatgttt tttattttga cgataaacct agttaaggca taaaagagtt    60
31  gcgaaggaag agccctcaac ttttcttatc accttcttta actaggagtc atccatgagt   120
32  caaaataaga actctgcttt catgcagcct gtgaacgtat ccgctgattt agctgccatc   180
33  gttggtgcag gacctatgcc tcgcacagag atcattaaga aaatgtggga ttacattaag   240
34  gagaatagtc ttcaagatcc tacaaacaaa cgtaatatca atcccgatga taaattggct   300
35  aaagtttttg gaactgaaaa acctatcgat atgttccaaa tgacaaaaat ggtttctcaa   360
36  cacatcatta aataaaatag aaattgactc acgtgttcct cgtctttaag atgaggaact   420
37  agttcattct ttttgttcgt ttttgtgggt attactgtat ctttaacaac tatcttagca   480
38  g                                                                   481
40 <210> SEQ ID NO: 2
41 <211> LENGTH: 183
42 <212> TYPE: DNA
43 <213> ORGANISM: Chlamydia trachomatis
45 <400> SEQUENCE: 2
46  atcgttggtg caggacctat gcctcgcaca gagatcatta agaaaatgtg ggattacatt    60
47  aaggagaata gtcttcaaga tcctacaaac aaacgtaata tcaatcccga tgataaattg   120
48  gctaaagttt ttggaactga aaaacctatc gatatgttcc aaatgacaaa aatggtttct   180
49  caa                                                                 183
51 <210> SEQ ID NO: 3
52 <211> LENGTH: 110
53 <212> TYPE: DNA
54 <213> ORGANISM: Chlamydia trachomatis
56 <400> SEQUENCE: 3
57  gctgcgacat catgcgagct tgcaaaccaa catggacatc tccaatttcc ccttctaact    60
58  cgctctttgg aactaatgct gctaccgagt caatcacaat cacatcgacc               110
60 <210> SEQ ID NO: 4
61 <211> LENGTH: 555
62 <212> TYPE: DNA
63 <213> ORGANISM: Chlamydia trachomatis
65 <400> SEQUENCE: 4
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Input Set : A:\469c4.app.txt
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66  cggcacgagc ctaagatgct tatactactt taagggaggc ccttcgtatg ccgcgcatca.     60
67  ttggaataga tattcctgcg aaaaagaaat taaaaataag tcttacatat atttatggaa    120
68  tagggccagc tctttctaaa gagattattg ctagattgca gttgaatccc gaagctagag    180
69  ctgcagagtt gactgaggaa gaggttggtc gactaaacgc tcttttacag tcggattacg    240
70  ttgttgaagg ggatttgcgc cgtcgtgtgc aatctgatat caaacgtctg attactatcc    300
71  atgcttatcg tggacaaaga catagacttt ctttgcctgt tcgtggtcag agaacaaaaa    360
72  caaattctcg cacgcgtaag ggtaaacgta aaactattgc aggtaagaag aaataataat    420
73  ttttaggaga gagtgttttg gttaaaaatc aagcgcaaaa aagaggcgta aaaagaaaac    480
74  aagtaaaaaa cattccttcg ggcgttgtcc atgttaaggc tacttttaat aatacaattg    540
75  taaccataac agacc                                                      555
77 <210> SEQ ID NO: 5
78 <211> LENGTH: 86
79 <212> TYPE: PRT
80 <213> ORGANISM: Chlamydia trachomatis
82 <400> SEQUENCE: 5
83  Met Ser Gln Asn Lys Asn Ser Ala Phe Met Gln Pro Val Asn Val Ser
84  1               5                   10                  15
85  Ala Asp Leu Ala Ala Ile Val Gly Ala Gly Pro Met Pro Arg Thr Glu
86              20                  25                  30
87  Ile Ile Lys Lys Met Trp Asp Tyr Ile Lys Glu Asn Ser Leu Gln Asp
88          35                  40                  45
89  Pro Thr Asn Lys Arg Asn Ile Asn Pro Asp Asp Lys Leu Ala Lys Val
90      50                  55                  60
91  Phe Gly Thr Glu Lys Pro Ile Asp Met Phe Gln Met Thr Lys Met Val
92  65                  70                  75                  80
93  Ser Gln His Ile Ile Lys
94                  85
96 <210> SEQ ID NO: 6
97 <211> LENGTH: 61
98 <212> TYPE: PRT
99 <213> ORGANISM: Chlamydia trachomatis
101 <400> SEQUENCE: 6
102  Ile Val Gly Ala Gly Pro Met Pro Arg Thr Glu Ile Ile Lys Lys Met
103  1               5                   10                  15
104  Trp Asp Tyr Ile Lys Glu Asn Ser Leu Gln Asp Pro Thr Asn Lys Arg
105              20                  25                  30
106  Asn Ile Asn Pro Asp Asp Lys Leu Ala Lys Val Phe Gly Thr Glu Lys
107          35                  40                  45
108  Pro Ile Asp Met Phe Gln Met Thr Lys Met Val Ser Gln
109      50                  55                  60
111 <210> SEQ ID NO: 7
112 <211> LENGTH: 36
113 <212> TYPE: PRT
114 <213> ORGANISM: Chlamyida trachomatis
116 <400> SEQUENCE: 7
117  Ala Ala Thr Ser Cys Glu Leu Ala Asn Gln His Gly His Leu Gln Phe
118  1               5                   10                  15
119  Pro Leu Leu Thr Arg Ser Leu Glu Leu Met Leu Leu Pro Ser Gln Ser
120              20                  25                  30
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RAW SEQUENCE LISTING   DATE: 06/13/2001
PATENT APPLICATION: US/09/454,684A TIME: 19:49:16

Input Set : A:\469c4.app.txt
Output Set: N:\CRF3\06112001\I454684A.raw

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121   Gln Ser His Arg
122          35
124 <210> SEQ ID NO: 8
125 <211> LENGTH: 18
126 <212> TYPE: PRT
127 <213> ORGANISM: Chlamydia trachomatis
129 <400> SEQUENCE: 8
130   Leu Arg His His Ala Ser Leu Gln Thr Asn Met Asp Ile Ser Asn Phe
131   1               5                   10                  15
132   Pro Phe
135 <210> SEQ ID NO: 9
136 <211> LENGTH: 5
137 <212> TYPE: PRT
138 <213> ORGANISM: Chlamydia trachomatis
140 <400> SEQUENCE: 9
141   Leu Ala Leu Trp Asn
142   1               5
144 <210> SEQ ID NO: 10
145 <211> LENGTH: 11
146 <212> TYPE: PRT
147 <213> ORGANISM: Chlamydia trachomatis
149 <400> SEQUENCE: 10
150   Cys Cys Tyr Arg Val Asn His Asn His Ile Asp
151   1               5                   10
153 <210> SEQ ID NO: 11
154 <211> LENGTH: 36
155 <212> TYPE: PRT
156 <213> ORGANISM: Chlamydia trachomatis
158 <400> SEQUENCE: 11
159   Val Asp Val Ile Val Ile Asp Ser Val Ala Ala Leu Val Pro Lys Ser
160   1               5                   10                  15
161   Glu Leu Glu Gly Glu Ile Gly Asp Val His Val Gly Leu Gln Ala Arg
162              20                  25                  30
163   Met Met Ser Gln
164          35
166 <210> SEQ ID NO: 12
167 <211> LENGTH: 122
168 <212> TYPE: PRT
169 <213> ORGANISM: Chlamydia trachomatis
171 <400> SEQUENCE: 12
172   Met Pro Arg Ile Ile Gly Ile Asp Ile Pro Ala Lys Lys Lys Leu Lys
173   1               5                   10                  15
174   Ile Ser Leu Thr Tyr Ile Tyr Gly Ile Gly Pro Ala Leu Ser Lys Glu
175              20                  25                  30
176   Ile Ile Ala Arg Leu Gln Leu Asn Pro Glu Ala Arg Ala Ala Glu Leu
177          35                  40                  45
178   Thr Glu Glu Glu Val Gly Arg Leu Asn Ala Leu Leu Gln Ser Asp Tyr
179       50                  55                  60
180   Val Val Glu Gly Asp Leu Arg Arg Arg Val Gln Ser Asp Ile Lys Arg
```

```
181  65                  70                 75                  80
182  Leu Ile Thr Ile His Ala Tyr Arg Gly Gln Arg His Arg Leu Ser Leu
183                 85                 90                 95
184  Pro Val Arg Gly Gln Arg Thr Lys Thr Asn Ser Arg Thr Arg Lys Gly
185            100                105                110
186  Lys Arg Lys Thr Ile Ala Gly Lys Lys Lys
187        115                120
189 <210> SEQ ID NO: 13
190 <211> LENGTH: 20
191 <212> TYPE: PRT
192 <213> ORGANISM: Chlamydia trachomatis
194 <400> SEQUENCE: 13
195  Asp Pro Thr Asn Lys Arg Asn Ile Asn Pro Asp Asp Lys Leu Ala Lys
196   1            5                10                15
197  Val Phe Gly Thr
198             20
200 <210> SEQ ID NO: 14
201 <211> LENGTH: 20
202 <212> TYPE: PRT
203 <213> ORGANISM: Chlamydia trachomatis
205 <400> SEQUENCE: 14
206  Asp Asp Lys Leu Ala Lys Val Phe Gly Thr Glu Lys Pro Ile Asp Met
207   1            5                10                15
208  Phe Gln Met Thr
209             20
211 <210> SEQ ID NO: 15
212 <211> LENGTH: 161
213 <212> TYPE: DNA
214 <213> ORGANISM: Chlymidia trachomatis
216 <400> SEQUENCE: 15
217  atctttgtgt gtctcataag cgcagagcgg ctgcggctgt ctgtagcttc atcggaggaa    60
218  ttacctacct cgcgacattc ggagctatcc gtccgattct gtttgtcaac aaaatgctgg   120
219  cgcaaccgtt tctttcttcc caaactaaag caaatatggg a                       161
221 <210> SEQ ID NO: 16
222 <211> LENGTH: 897
223 <212> TYPE: DNA
224 <213> ORGANISM: Chlymidia trachomatis
226 <400> SEQUENCE: 16
227  atggcttcta tatgcggacg tttagggtct ggtacaggga atgctctaaa agctttttt    60
228  acacagccca acaataaaat ggcaagggta gtaaataaga cgaagggaat ggataagact   120
229  attaaggttg ccaagtctgc tgccgaattg accgcaaata ttttggaaca agctggaggc   180
230  gcgggctctt ccgcacacat tacagcttcc caagtgtcca aaggattagg ggatgcgaga   240
231  actgttgtcg ctttagggaa tgcctttaac ggagcgttgc caggaacagt tcaaagtgcg   300
232  caaagcttct tctctcacat gaaagctgct agtcagaaaa cgcaagaagg ggatgagggg   360
233  ctcacagcag atctttgtgt gtctcataag cgcagagcgg ctgcggctgt ctgtagcatc   420
234  atcggaggaa ttacctacct cgcgacattc ggagctatcc gtccgattct gtttgtcaac   480
235  aaaatgctgg caaaaccgtt tctttcttcc caaactaaag caaatatggg atcttctgtt   540
236  agctatatta tggcggctaa ccatgcagcg tctgtggtgg gtgctggact cgctatcagt   600
237  gcggaaagag cagattgcga agcccgctgc gctcgtattg cgagagaaga gtcgttactc   660
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238  gaagtgccgg gagaggaaaa tgcttgcgag aagaaagtcg ctggagagaa agccaagacg   720
239  ttcacgcgca tcaagtatgc actcctcact atgctcgaga agtttttgga atgcgttgcc   780
240  gacgttttca aattggtgcc gctgcctatt acaatgggta ttcgtgcgat tgtggctgct   840
241  ggatgtacgt tcacttctgc aattattgga ttgtgcactt tctgcgccag agcataa       897
243 <210> SEQ ID NO: 17
244 <211> LENGTH: 298
245 <212> TYPE: PRT
246 <213> ORGANISM: Chlamydia trachomatis
248 <400> SEQUENCE: 17
249 Met Ala Ser Ile Cys Gly Arg Leu Gly Ser Gly Thr Gly Asn Ala Leu
250 1               5                   10                  15
251 Lys Ala Phe Phe Thr Gln Pro Asn Asn Lys Met Ala Arg Val Val Asn
252             20                  25                  30
253 Lys Thr Lys Gly Met Asp Lys Thr Ile Lys Val Ala Lys Ser Ala Ala
254         35                  40                  45
255 Glu Leu Thr Ala Asn Ile Leu Glu Gln Ala Gly Gly Ala Gly Ser Ser
256     50                  55                  60
257 Ala His Ile Thr Ala Ser Gln Val Ser Lys Gly Leu Gly Asp Ala Arg
258 65                  70                  75                  80
259 Thr Val Val Ala Leu Gly Asn Ala Phe Asn Gly Ala Leu Pro Gly Thr
260             85                  90                  95
261 Val Gln Ser Ala Gln Ser Phe Phe Ser His Met Lys Ala Ala Ser Gln
262             100                 105                 110
263 Lys Thr Gln Glu Gly Asp Glu Gly Leu Thr Ala Asp Leu Cys Val Ser
264         115                 120                 125
265 His Lys Arg Arg Ala Ala Ala Ala Val Cys Ser Ile Ile Gly Gly Ile
266         130                 135                 140
267 Thr Tyr Leu Ala Thr Phe Gly Ala Ile Arg Pro Ile Leu Phe Val Asn
268 145                 150                 155                 160
269 Lys Met Leu Ala Lys Pro Phe Leu Ser Ser Gln Thr Lys Ala Asn Met
270             165                 170                 175
271 Gly Ser Ser Val Ser Tyr Ile Met Ala Ala Asn His Ala Ala Ser Val
272             180                 185                 190
273 Val Gly Ala Gly Leu Ala Ile Ser Ala Glu Arg Ala Asp Cys Glu Ala
274         195                 200                 205
275 Arg Cys Ala Arg Ile Ala Arg Glu Glu Ser Leu Leu Glu Val Pro Gly
276     210                 215                 220
277 Glu Glu Asn Ala Cys Glu Lys Lys Val Ala Gly Glu Lys Ala Lys Thr
278 225                 230                 235                 240
279 Phe Thr Arg Ile Lys Tyr Ala Leu Leu Thr Met Leu Glu Lys Phe Leu
280             245                 250                 255
281 Glu Cys Val Ala Asp Val Phe Lys Leu Val Pro Leu Pro Ile Thr Met
282             260                 265                 270
283 Gly Ile Arg Ala Ile Val Ala Ala Gly Cys Thr Phe Thr Ser Ala Ile
284         275                 280                 285
285 Ile Gly Leu Cys Thr Phe Cys Ala Arg Ala
286     290                 295
288 <210> SEQ ID NO: 18
289 <211> LENGTH: 18
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file://C:\CRF3\Outhold\VsrI454684A.htm　　　　　　　　　　6/13/01

VERIFICATION SUMMARY   DATE: 06/13/2001
PATENT APPLICATION: US/09/454,684A   · TIME: 19:49:17

Input Set : A:\469c4.app.txt
Output Set: N:\CRF3\06112001\I454684A.raw

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L:713  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45
L:734  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46
L:762  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47
L:1189 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69
L:1269 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72
L:1270 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72
L:1299 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
L:1300 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
L:1301 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
L:1362 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:76
L:2313 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:120
L:3769 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:175
L:3973 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:176
L:5196 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:189
L:5200 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:189
L:5222 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:189
L:5224 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:189
L:5226 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:189
L:6857 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:263
L:6898 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:264
L:6934 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:265
L:6975 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:266
L:7061 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:271
L:7319 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:287
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